

# How Cisco Created Its Own Customer Interaction Network

IP contact center customer interaction network reduces costs and improves customer service.

**Cisco IT Case Study / IP Contact Center / IP Contact Center Network:** This case study describes how Cisco Systems created an internal Customer Interaction Network (CIN) by using its own contact center solutions to route customer calls to outsourcers located around the world. The Cisco CIN gives customers the simplicity of a single, in-country telephone number for all Cisco sales, support, and general information inquiries. Cisco benefits from the reduced costs, more efficient call handling, and better use of experts that is possible when outsourcers handle first-line calls. The CIN takes advantage of the robust routing and security capabilities of the Cisco network, a leading-edge enterprise environment that is one of the largest and most complex in the world. Customers can draw on Cisco IT's real-world experience in this area to help support similar enterprise needs.

“Whether an agent is at an outsourcer’s call center or a Cisco call center is completely transparent to customers, to the Cisco Unified Intelligent Contact Management Enterprise system, and to Cisco business managers.”

— Veronique Boudaud,

Director of Cisco technical support

## CHALLENGE

Most large companies operate multiple contact centers, particularly to manage their sales and customer support functions. Internal contact centers are costly to build and operate, and it can be a challenge to consolidate them for greater efficiency or change them to meet new business needs. As a result, many enterprises have adopted an outsourcing model. Outsourcers focus solely on running contact centers—often in multiple locations worldwide—and offer the advantages of lower cost, higher productivity, and greater flexibility for handling a company's inbound telephone and e-mail communications.

For Cisco Systems®, the outsourcing option emerged as the company grew, particularly through acquisitions—which brought more customers, more calls, and more contact centers. In early 2002, Cisco® had more than 60 contact center teams located at 22 different sites worldwide, reached by nearly 540 different telephone numbers. Separate internal or outsourced centers handled customer-facing functions such as presales inquiries, technical support, training and registrations, and corporate operators. Other centers offered services for certain languages or countries. Across world regions, multiple but independent centers often served the same functions, creating an overlap that added costs and management burden—and added complications for customers.

“Customers had to work to contact us,” says Brian Fady, manager of the Cisco Customer Interaction Network. “They had to identify which number to call, and often experienced several transfers before reaching the correct resource—and felt like they were dealing with a different company at each transfer. This structure meant inconsistent service levels, reduced customer satisfaction, and lost sales opportunities.”

The large number of dispersed contact centers meant high costs for labor, facilities, and the network and IT infrastructure. For example, separate call centers for corporate operators in several countries yielded a difference in

handling costs of as much as US\$10 per call. And improving operations across so many call centers was difficult because each center used different tools for management and reporting.

Cisco began to consider a new type of contact center model: a combination of outsourcing and internal management. This model had two primary components: internally deploying a central Cisco Unified Intelligent Contact Management Enterprise system with several Cisco Unified IP Contact Center solutions, and outsourcing certain types of calls to companies that could provide efficient, high-quality service at a lower cost. The vision was simple: make it easier for customers to do business with Cisco and reduce the costs and complexity of the contact centers. Bringing the vision to reality involved several strategies:

- Use the Cisco network for call transport as much as possible while reducing the infrastructure required for connecting to the outsourcers.
- Encourage the outsourcers to deploy Cisco contact center solutions for greater routing control and management visibility.
- Reduce costs for each call transaction as well as for off-net call transport and toll-free access services.
- Define common expectations for service-level agreements (SLAs) with the outsourcers.
- Manage all customer access (via telephone, e-mail, and Internet tools) across the enterprise.
- Create a shared knowledge base to help outsourcer agents deliver a consistent, high level of service.
- Gain economies of scale by using fewer outsourcers to handle multiple call types and multiple languages while maintaining 24-hour availability and coverage for call overflows.

For Cisco Technical Assistance Centers (TAC), another goal was to reduce the number of incoming calls by encouraging customers to use self-service tools on Cisco.com. As customers became more familiar with the Web resources, Cisco TAC managers believed the outsourcer agents could handle more complex calls. In turn, Cisco TAC employees would be able to focus on the highest priority and most difficult problems. “Our goal was to save costs by reducing the total number of calls to Cisco TAC engineers and making the best use of expensive staff time,” says Fady.

## SOLUTION

Initially, a central Cisco ICM system was deployed, combined with peripheral gateways at outsourcer sites to allow dynamic routing of calls to multiple contact centers. This solution has evolved into the Cisco Customer Interaction Network (CIN), supported by Cisco contact center solutions and the Cisco network. The Cisco CIN provides a consistent experience for Cisco customers when they contact the company, regardless of the type, source, or destination of the customer’s call.

Cisco’s CIN implementation uses outsourced contact centers to answer all inbound calls within a Cisco region. Call types include sales orders, customer service, technical support, general inquiries, and calls to Cisco corporate operators. Cisco customers can dial a single, toll-free telephone number in each country. The fact that the contact center is outsourced and may be located in another part of the world is transparent to the caller.

The Cisco CIN was initially implemented in Cisco’s Europe, Middle East, and Africa (EMEA) region using a single outsourcer location in Belfast, Northern Ireland. This outsourcer uses a Cisco Unified IP Contact Center solution for call handling. Over time, Cisco will expand its CIN to serve customers in North America from outsourced contact centers.

Cisco also uses separately outsourced contact centers for other internal and customer-facing business functions. To learn more about these applications, read the following case studies:

- [Technical Support Web Collaboration](#): Overview of how Cisco used outsourcers to handle first-line technical support calls.

- [Linksys IP Contact Center](#): Describes how outsourcers handle sales and support calls for Linksys, a division of Cisco.
- [Travel and Event Management](#): Discusses how Cisco outsources the contact center for employee travel services.

These case studies and additional Cisco IT case studies on a variety of business solutions are available at [http://www.cisco.com/web/about/ciscoitwork/case\\_study.html](http://www.cisco.com/web/about/ciscoitwork/case_study.html)

### Enabled by Cisco Contact Center Solutions

Cisco uses a standard infrastructure to communicate with the outsourced contact centers, whether they are part of the CIN or separately serving other functions or regions. This infrastructure includes the following:

- A central Cisco Unified Intelligent Contact Management Enterprise system, which dynamically routes calls to outsourcer sites based on real-time agent availability.
- Cisco Unified CallManager systems, which provide the telephony functions for processing calls received by and transferred from the Cisco Unified Intelligent Contact Management Enterprise system.
- Cisco IP Interactive Voice Response (IVR) systems, which provide initial routing input for each call.
- A customized screen display, created with the Cisco Computer Telephony Integration Object Server (CTI OS) Agent Desktop software, which provides pertinent information to the agent as the call is transferred from the Cisco Unified Intelligent Contact Management Enterprise system to the agent's phone.

When the central Cisco Unified Intelligent Contact Management Enterprise system routes a call to an outsourcer, it transports the call on the Cisco network to Cisco's nearest point of presence, then completes the transfer via the local public network. This design reduces toll costs compared to making a direct, international call transfer over the public network.

The outsourcing vendors receive the Cisco calls on a mix of traditional, time-division multiplexing (TDM) call distribution systems and newer, IP-based systems, such as the Cisco Unified IP Contact Center solution.

Initially, Cisco simply transferred calls to each outsourcer location according to basic rules such as call type or percentage allocation. Although simple to implement, this method did not give Cisco business managers visibility into current call handling performance or the flexibility to respond to changing volumes or contact center conditions.

After establishing the proper security measures, Cisco IT created extranet links on the company's WAN to connect a Cisco peripheral gateway at each outsourcer site to the central Cisco Unified Intelligent Contact Management Enterprise system. This method provides a real-time view of agent availability for greater flexibility in routing calls among multiple contact centers. Because the peripheral gateways support the most commonly deployed PBX systems, Cisco can choose the best outsourcing vendor for each region or business need.

"This insight prompted us to examine our use of outsourcers across the company," says Cindy Mike, a Cisco Manager. "In some cases, we were using the same vendor for multiple call types, but with no standards for service levels or other contract issues. We wanted to change how we used contact centers by looking at our needs and potential economies companywide, instead of by business function or geographic region."

Cisco IT's Contact Center Application Team wrote Cisco Unified Intelligent Contact Management Enterprise routing scripts to meet the goals for better serving customers and maximizing efficiency among the outsourced contact centers. Scripts covered issues such as:

- Call handling outside of local business hours
- Call allocation among the different outsourcers based on factors such as type, current volumes, and service levels

- Language support for German, French, Italian, Spanish, Dutch, and English

## RESULTS

As of late 2005, Cisco had gained several benefits from its CIN and use of outsourcers, including:

- Consolidated contracts with fewer outsourcers, reducing costs and administrative demands while simplifying reports and facilitating improved service levels.
- Improved interaction among contact centers, achievement of economies of scale, and more flexible use of outsourcers.
- Reduced costs for international transport and toll-free services by receiving calls on a local number and routing those calls to outsourcers over the Cisco network instead of public networks.
- More efficient use of outsourcer agents, increasing the value of savings in labor costs through lower per-call handling charges.
- Improved customer satisfaction by providing a single telephone number for all Cisco contacts.
- Increased customer use of self-service tools as a result of agents providing guidance during calls or CiscoLive! interactive sessions.

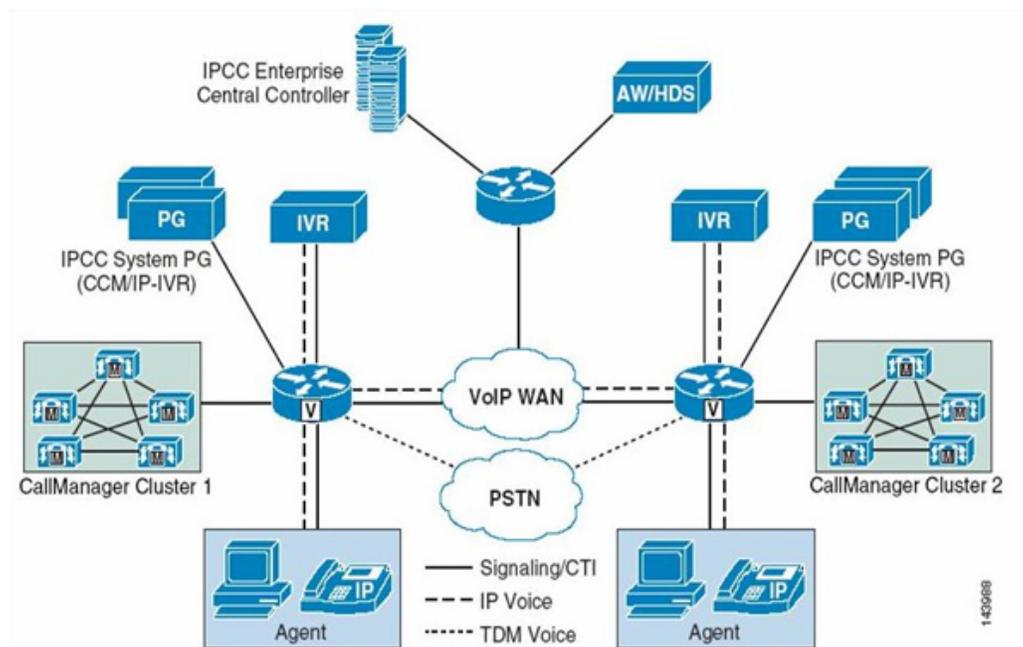
For customers, it has become much easier to do business with Cisco, regardless of the nature of the call. In most cases, the agent is able to achieve a first-time resolution for inquiries instead of requiring the customer to endure multiple calls or transfers until connecting with the right resource. “Whether an agent is at an outsourcer’s call center or a Cisco center is completely transparent to customers, to the Cisco Unified Intelligent Contact Management Enterprise system, and to Cisco business managers,” says Veronique Boudaud, director of Cisco technical support.

“The Cisco Unified Intelligent Contact Management Enterprise system gives us visibility on agent activity that helps us to better manage both agent availability and call volumes. This is more significant than simply pushing calls to the outsourcer; it allows us to set up conditional routing and call overflow across all outsourcers,” says Mike. “We have more options for using certain outsourcers in each application and country, and can consolidate contracts for certain call types in order to use our best outsourcers to handle multiple types of calls regionwide.”

### **A More Cost-Efficient Infrastructure**

The outsourcing architecture (Figure 1) produces more efficient call routing and significant cost savings for Cisco. Within the EMEA region, consolidation of outsourcers has significantly reduced equipment needs and the associated costs of network links, management, and support.

“Our Cisco Unified IP Contact Center implementation gives us the flexibility and adaptability to route calls globally so that our customers can speak to an agent at any time,” says Cieran Duffy, Cisco IT engineer. “And because we can transport the calls on the WAN, global routing has little or no cost. Cisco Unified Intelligent Contact Management Enterprise will enable us to create a direct link between our own contact management system and an outsourcer’s system for status visibility, call control, and reporting down to the individual agent level.”

**Figure 1.** Central Routing of All Inbound Calls and Transporting International Calls over the Cisco WAN

This infrastructure enables Cisco and its outsourcers to provide high quality to customers and employees. For FY2005, Cisco and its outsourced contact centers worldwide handled the following annual volumes:

- 14 million calls received by the Cisco Unified Intelligent Contact Management Enterprise system
- 710,000 e-mail messages queued by the Cisco E-Mail Manager Option
- 3600 CiscoLive! sessions
- 1400 agents globally across outsourcer sites
- More than 400 Cisco Unified Intelligent Contact Management Enterprise scripts and more than 200 Cisco IP IVR scripts to control call routing

## LESSONS LEARNED

Each EMEA country made an individual transition to a single outsourcing vendor and the Cisco CIN. Transition activities included deploying the necessary technology, network links, and scripts; defining processes, SLAs, and reports; and training agents.

When Cisco enterprise customers consider outsourcing a contact center, Boudaud points out two important decision factors: “First, you need to identify the number or type of calls that are appropriate for handling by an outsourcer. Then you can identify whether different outsourcers are needed to support different call requirements, such as multiple languages or specialized functions within your company.”

Technical challenges in implementing this model included establishing extranet links from the Cisco network to the outsourcer location and configuring Cisco’s own firewalls and access control lists to properly secure those links. In addition, Cisco IT had to find answers to the regulatory and import issues covering equipment and network access that are specific to each country.

## NEXT STEPS

Cisco IT's next steps include assisting outsourcers that are migrating to Cisco Unified IP Contact Center solutions and implementing new capabilities in the current Cisco infrastructure.

For example, Cisco Unified Intelligent Contact Management Enterprise enables flexible routing of video connections and Cisco Live! interactive sessions (which are controlled by a Cisco Collaboration Server over the Cisco network). As outsourcer agents acquire the necessary skills and knowledge, more Cisco Live! sessions can be handled by outsourcers instead of Cisco employees. This will allow creative applications, such as video sessions that agents can use to train each other on call techniques, product information, and other job resources.

A longer-term strategy is to implement more consistent business standards for the outsourced contact centers worldwide. In addition, Cisco business managers will continue to look at ways to use the company's outsourcers more efficiently, such as one contact center handling all calls in a specific language.

## FOR MORE INFORMATION

To read the entire case study or for additional Cisco IT case studies on a variety of business solutions, visit Cisco on Cisco: Inside Cisco IT [www.cisco.com/go/ciscoit](http://www.cisco.com/go/ciscoit)

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